

REMARKS

In response to the Office Action mailed September 2, 2008 and the Advisory Action mailed December 18, 2008, Applicant respectfully requests reconsideration. To further the prosecution of this Application, Applicant submits the following remarks and has added claims. The claims as now presented are believed to be in allowable condition.

Claims 1 and 58-129 were pending in this Application. Claims 1, 66, 78, 81, 88, 96, 99, 108, 118, 121, 122, and 125 have been amended. Support for the amendments is provided within the Specification, for example, on page 28, lines 4-5 and on page 38, line 4. The amendments do not add new matter to the Application. Claims 130 and 131 have been added. Accordingly, claims 1 and 58-131 are now pending. Claims 1, 66, 78, 81, 88, 96, 99, 108, 118, 121, 122, and 125 are independent claims.

Claim Objections

Claims 66-80, 88-98, 108-120, and 122-126 were objected to. The Office Action asserts on page 19 that the term "cluster-capable" can be interpreted as an intended use which is a non-positive recitation of a claim limitation. Claims 66, 78, 88, 96, 108, 118, 122, and 125 have been amended to positively and recite the devices as configured to operate as part of a cluster. The amendments to the claims should in no way be construed as an acquiescence to the objections and was done solely to expedite prosecution of the Application. Support for the amendments can be found in the Specification, such as on page 50, line 4 through page 51, line 9, for example. The amendments do not add new matter to the Application and do not raise new issues requiring further search and consideration. Accordingly, the objection to claims 66-80, 88-98, 108-120, and 122-126 should be withdrawn.

Rejections under §102 and §103

Claims 1, 58-73, 75-77, 81-95, 99-113, 115-117, 121-124 and 127-129 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,018,137 to Backes et al. (hereinafter Backes) in view of U.S. Patent No. 5,574,860 to Perlman et al. (hereinafter Perlman). Claims 74 and 114 were rejected under 35 U.S.C. §103(a) as being unpatentable over Backes in view of Perlman and in further view of U.S. Patent No. 5,809,483 to Broka et al. (hereinafter Broka). Claims 78-80, 96-98, 118-120 and 125-126 were rejected under 35 U.S.C. §102(b) as being anticipated by Backes.

Applicant respectfully traverses each of these rejections and requests reconsideration. The claims are in allowable condition.

Independent claims 1, 66, 81, 88, 99, 108, 121, and 122 were rejected as being unpatentable over Backes in view of Perlman. Taking claim 1 as amended as an example, claim 1 relates to a method for discovering and configuring network devices into a cluster, the method comprising automatically detecting, by a commander network device, candidate devices by receiving discovery packets from the candidate devices, the candidate devices periodically transmitting the discovery packets and the commander network device being user-configured as the point of access for the devices of the cluster, determining whether any of the candidate devices is qualified to join the cluster by applying qualification rules to the discovery packets received from the candidate devices, and presenting to a user a list of the candidate network devices that are qualified to join the cluster.

Backes relates to a method for improving communication among end nodes in a collection of networks connected to a plurality of end nodes and to at least one of a plurality of bridges used to forward messages in a time sequence between the end nodes. Column 3, lines 55-59. As recited in Backes,

one of the bridges connected to each of the networks is selected as a designated bridge for that network to forward messages to and from that network. The remaining bridges connected to that network which are not selected as a designated bridge are deemed to be daughter bridges. Column 5, lines 6-12.

With respect to the selection of a bridge as the designated or root bridge, Backes recites the root bridge as a bridge chosen by the other bridges to help in organizing a spanning tree. Column 6, lines 39-41. As indicated in Backes, in the selection process, bridges exchange configuration messages, called bridge protocol data units (BPDUs), with the other bridges connected to the same network. Column 6, lines 10-14. Next in Backes, each bridge evaluates the BPDUs from the other bridges to choose a designated bridge and daughter bridges for each network. Column 7, lines 18-20. For example, as recited in Backes:

[p]referably, while the bridges are exchanging BPDU's, all bridges connected to the same network compare root path costs, which are concurrently being determined in a manner described above. The bridge with the lowest root path cost is deemed to be the designated bridge for that network. If multiple bridges have the same root path cost, then some technique, such as use of the bridge identifier is used to select the designated bridge. All of the bridges connected to a network which do not have another path to the root, and are not selected to be a designated bridge are deemed to be daughter bridges. Column 7, lines 27-37.

Perlman relates to techniques for stations or nodes connected to a network to be aware of each others' connection to and departure from the network. Column 1, lines 7-9.

The Office Action has rejected claims 1, 66, 81, 88, 99, 108, 121, and 122 were rejected as being unpatentable over Backes in view of Perlman. However, Applicant's claims 1, 66, 81, 88, 99, 108, 121, and 122 as amended are patentable over Backes in view of Perlman because neither Backes nor Perlman teaches or suggests all of the elements of the claims. For example, neither

Backes nor Perlman teaches or suggests a method for discovering and configuring network devices into a cluster comprising "automatically detecting, by a commander network device, candidate devices by receiving discovery packets from the candidate devices, the candidate devices periodically transmitting the discovery packets and the commander network device being user-configured as the point of access for the devices of the cluster," as claimed by Applicant.

As indicated above, in use, the bridges in Backes select one of the network bridges as the designated or root bridge based upon the exchanged BPDUs among the bridges. As described, all of the bridges in Backes must engage in the BDPUs message exchange in order for one of the bridges to be deemed the root or designated bridge by the remaining bridges. By contrast, the commander network device of claims 1, 66, 81, 88, 99, 108, 121, and 122 of the present Application is user-configured as the point of access for the devices of the cluster. Accordingly Backes does not teach or suggest "automatically detecting, by a commander network device, candidate devices by receiving discovery packets from the candidate devices, the candidate devices periodically transmitting the discovery packets and the commander network device being user-configured as the point of access for the devices of the cluster," as claimed by Applicant.

Furthermore, Perlman does not cure the deficiencies of Backes. Perlman, is silent regarding "automatically detecting, by a commander network device, candidate devices by receiving discovery packets from the candidate devices, the candidate devices periodically transmitting the discovery packets and the commander network device being user-configured as the point of access for the devices of the cluster," as claimed by Applicant.

For the reasons stated above, claims 1, 66, 81, 88, 99, 108, 121, and 122 patentably distinguish over the cited prior art, and the rejection of claims 1, 66,

81, 88, 99, 108, 121, and 122 under 35 U.S.C. §103 (a) should be withdrawn. Accordingly, claims 1, 66, 81, 88, 99, 108, 121, and 122 are in allowable condition. Because claims 58-65 and 127 depend from and further limit claim 1, claims 58-65 and 127 are in allowable condition for at least the same reasons. Because claims 67-77 depend from and further limit claim 66, claims 67-77 are in allowable condition for at least the same reasons. Because claims 82-87 and 128 depend from and further limit claim 81, claims 82-87 and 128 are in allowable condition for at least the same reasons. Because claims 89-95 depend from and further limit claim 88, claims 89-95 are in allowable condition for at least the same reasons. Because claims 100-106 and 129 depend from and further limit claim 99, claims 100-106 and 129 are in allowable condition for at least the same reasons. Because claims 109-117 depend from and further limit claim 108, claims 109-117 are in allowable condition for at least the same reasons. Because claims 123 and 124 depend from and further limit claim 122, claims 123 and 124 are in allowable condition for at least the same reasons.

The Office Action has rejected claims 78, 96, 118, and 125 under 35 U.S.C. §102(b) as being anticipated by Backes. Taking claim 78 as amended as an example, claim 78 relates to a method for discovering candidate network devices to be configured into a cluster of network devices and managed via a commander network device, the method comprising periodically transmitting discovery packets from the candidate network devices to a commander network device, the commander network device being user-configured as the point of access for the devices of the cluster, the discovery packets including information indicating that the candidate network device is-configured to operate as part of the cluster of network devices, maintaining, at each of the candidate network devices, a neighbor device database containing information about other candidate network devices directly connected to the candidate network device, and transmitting the information in the neighbor device database to the commander network device when the candidate network device is added to the

cluster, all communication with network devices in the cluster being through a single network address assigned to the commander network device.

The Office Action has rejected claims 78, 96, 118, and 125 as being anticipated by Backes. However, Applicant's claims as amended 78, 96, 118, and 125 are patentable over Backes because Backes does not teach or suggest all of the elements of the claims. For example, Backes does not teach or suggest "periodically transmitting discovery packets from the candidate network devices to a commander network device, the commander network device being user-configured as the point of access for the devices of the cluster, the discovery packets including information indicating that the candidate network device is-configured to operate as part of the cluster of network devices," as claimed by Applicant.

As indicated above, in use, the bridges in Backes select one of the network bridges as the designated or root bridge based upon the exchanged BPDUs among the bridges. As described, all of the bridges in Backes must engage in the BDPUs message exchange in order for one of the bridges to be deemed the root or designated bridge by the remaining bridges. By contrast, the commander network device of claims 1, 66, 81, 88, 99, 108, 121, and 122 of the present Application is user-configured as the point of access for the devices of the cluster. Accordingly Backes does not teach or suggest "periodically transmitting discovery packets from the candidate network devices to a commander network device, the commander network device being user-configured as the point of access for the devices of the cluster, the discovery packets including information indicating that the candidate network device is configured to operate as part of the cluster of network devices," as claimed by Applicant.

For the reasons stated above, claims 78, 96, 118, 125 patentably distinguish over the cited prior art, and the rejection of claims 78, 96, 118, 125 under 35 U.S.C. §103(b) should be withdrawn. Accordingly, claims 78, 96, 118, 125 are in allowable condition. Because claims 79 and 80 depend from and further limit claim 78, claims 79 and 80 are in allowable condition for at least the same reasons. Because claims 97 and 98 depend from and further limit claim 96, claims 97 and 98 are in allowable condition for at least the same reasons. Because claims 119 and 120 depend from and further limit claim 118, claims 119 and 120 are in allowable condition for at least the same reasons. Because claim 126 depends from and further limits claim 125, claim 126 is in allowable condition for at least the same reasons.

#### Newly Added Claims

Claims 130 and 131 have been added and are believed to be in allowable condition. Claims 130 and 131 depend from claim 1. Support for claim 130 is provided within the Specification, for example, on page 41, lines 7-14. Support for claim 131 is provided within the Specification, for example, on page 37, lines 15-17. No new matter has been added.

-27-

Conclusion

In view of the foregoing remarks, this Application should be in condition for allowance. A Notice to this effect is respectfully requested. If the Examiner believes, after this Response, that the Application is not in condition for allowance, the Examiner is respectfully requested to call the Applicant's Representative at the number below.

Applicant hereby petitions for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this Response, including an extension fee, please charge any deficiency to Deposit Account No. 50-3661.

If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully requested to contact the undersigned collect at (508) 616-2900, in Westborough, Massachusetts.

Respectfully submitted,

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